AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-30. (Cancelled)

31. (Amended) A passive sampling device for monitoring over a period of time micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane contactable in use with the aquatic environment to be monitored and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the acquatic environment by said membrane,~~ a receiving phase having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase is: ~~a handleable and easily~~

(i) a removable unitary element;

(ii) separated from the aquatic environment by said membrane;

(iii) comprised of ~~comprising~~ a solid phase material immobilised by being bound in or to a hydrophobic solid support.

32. (Previously Presented) A device according to claim 31, wherein the solid support is in the form of a solid carrier for the solid phase material, which does not contain or retain water within its structure and can not exchange water with its

environment, whereby the solid support is not subject to loss of water and hence changes in dimension, due either to evaporation or osmotic efflux.

33. (Previously Presented) A device according to claim 31, wherein the diffusion-limiting membrane comprises a solid, hydrophobic material, which contains less than 1% water and/or is substantially non-porous, whereby the diffusion pathway comprises the solid polymer itself and not any water contained therein.

34. (Previously Presented) A device according to claim 31, wherein the diffusion-limiting membrane comprises polyethylene.

35. (Previously Presented) A device according to claim 31, suitable for monitoring polar, organic micropollutants, wherein the membrane is selected from polysulphone, polycarbonate, cellulose dialysis membrane, PTFE, PVDF and glass fibre.

36. (Previously Presented) A device according to claim 31, suitable for monitoring inorganic micropollutants, wherein the membrane is selected from cellulose acetate, glass fibre membranes, nylon membranes and dialysis membranes.

37. (Previously Presented) A device according to claim 31, wherein the diffusion-limiting membrane is or is associated with a molecular charge selective material.

38. (Previously Presented) A device according to claim 37, wherein the molecular charge selective material is selected from poly(4-vinylpyridine), poly(2,6-dimethylphenol) and perfluorinated polymers having pendant sulphonic acid groups.

39. (Previously Presented) A device according to claim 31, wherein the thickness of the membrane, and therefore diffusion pathway, is in the range of from 0.02 to 0.15 mm.

40. (Previously Presented) A device according to claim 39, wherein the thickness of the membrane, and therefore diffusion pathway, is less than 0.1 mm.

41. (Previously Presented) A device according to claim 31, wherein the thickness of the receiving phase is less than 1 mm.

42. (Previously Presented) A device according to claim 31, wherein the solid receiving phase is in the form of a cartridge or disk.

43. (Previously Presented) A device according to claim 31, wherein the immobilised solid phase material comprises C_8 to C_{18} chain length hydrocarbon groups bonded in a silica-based polymer.

44. (Previously Presented) A device according to claim 31, wherein the solid support comprises a matrix of fibres.

45. (Previously Presented) A device according to claim 44, wherein the matrix of fibres comprises hydrophobic fibres.

46. (Previously Presented) A device according to claim 31, wherein a face of the membrane remote from the receiving phase is provided with netting or a mesh.

47. (Previously Presented) A unit for use as a passive sampling device, which unit comprises a device according to claim 31, and an inert body adapted to allow insertion therein and removal therefrom of the solid receiving phase and adapted to allow access from the aqueous environment of the micropollutants to the membrane.

48. (Previously Presented) A unit according to claim 47, provided with removable means for enabling water or conditioning liquid to be maintained in contact with the solid receiving phase between preparation and use of the device.

49. (Previously Presented) A unit according to claim 48, wherein the unit and/or removable means comprise(s) PTFE.

50. (Amended) A passive sampling method for monitoring over a period of time the concentrations of micropollutants in a polluted environment, which method comprises:

(a) providing a receiving phase having a sufficiently high affinity for the micropolutants for receiving and retaining the micropollutants, the receiving phase being a ~~handleable and easily removable~~ unitary element comprising a solid phase material immobilised by being bound in or to a hydrophobic solid support;

(b) providing a diffusion-limiting membrane adapted to allow rate-limited diffusion therethrough of the micropollutants ~~and, in use, adapted to separate said receiving phase from said polluted environment~~;

(c) separating said receiving phase from said polluted environment using said membrane;

~~(c)~~ (d) bringing the membrane into contact with said polluted environment for a sufficient period of time to allow the micropollutants to collect in ~~the immobilised solid phase material~~ said receiving phase;

~~(d)~~ (e) removing said receiving phase from said polluted environment; and

~~(e)~~ (f) analysing the micropollutants accumulated in said receiving phase.

51. (Amended) A method according to claim 50, wherein, in step ~~(d)~~ (e), the solid receiving phase is removed from the environment and separated from the ~~device~~ membrane.

52. (Amended) A method according to claim 50, wherein the step ~~(e)~~ (f) comprises applying extraction solvent to the receiving phase, whereby the ~~analytes~~ micropollutants are removed from the receiving phase.

53. (Amended) A method according to claim 52, wherein the extraction solvent is applied to one face of the receiving phase and is collected, containing the micropollutants ~~analyte(s)~~, at the opposite face thereof.

54. (Amended) A method according to claim 50, which further comprises pre-treating the receiving phase by coating ~~or impregnating~~ it with the diffusion-limiting membrane; by conditioning it with a conditioner; or by loading it with internal standard; or any combination thereof.

55. (Previously Presented) A method according to claim 50, which further comprises pre-treating the receiving phase by treating it with an agent adapted to complex, chelate or otherwise assist the receiving phase to receive and retain the chosen micropollutant.

56. (Previously Presented) A method according to claim 50, which further comprises pre-treating the receiving phase by coating or impregnating it with a photometric agent selected from bathocuproine, methylthymol blue, xylenol orange, glycine cresol red, binchinonic acid and 1,5-diphenyl carbohydrazide.

57. (Previously Presented) A method according to claim 50, which further comprises pre-treating the receiving phase by coating or impregnating it with an internal standard comprising an isotopically-labelled compound, capable of, during deployment of the device, diffusing from the receiving phase through the diffusion-limiting membrane and into the aquatic environment at a known and controlled rate.

58. (Amended) A passive sampling device for monitoring over a period of time the concentrations of non-polar, organic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane contractable in use with the aquatic environment to be monitored and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aquatic environment by said membrane,~~ a receiving phase having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase is: ~~a handleable and easily~~

(i) a removable unitary element;

(ii) separated form the aquatic environment by said membrane;

(iii) comprised of ~~comprising~~ a solid phase material immobilised by being bound in or to a hydrophobic solid support,

and wherein the diffusion-limiting membrane comprises a solid, hydrophobic polymeric material capable of determining the rate of diffusion of the micropollutants therethrough.

59. (Canceled)

60. (Previously Presented) A device according to claim 58, wherein the solid support is in the form of a solid carrier for the solid phase material, which does not contain or retain water within its structure and can not exchange water with its environment, whereby the solid support is not subject to loss of water and hence changes in dimension, due either to evaporation or osmotic efflux.

61. (Previously Presented) A device according to claim 58, wherein the diffusion-limiting membrane comprises a solid, hydrophobic material, which contains less than 1% water and/or is substantially non-porous, whereby the diffusion pathway comprises the solid polymer itself and not any water contained therein.

62. (Previously Presented) A device according to claim 58, wherein the diffusion-limiting membrane comprises polyethylene.

63. (Previously Presented) A device according to claim 58, suitable for monitoring polar, organic micropollutants, wherein the membrane is selected from polysulphone, polycarbonate, cellulose dialysis membrane, PTFE, PVDF and glass fibre.

64. (Previously Presented) A device according to claim 58, suitable for monitoring inorganic micropollutants, wherein the membrane is selected from cellulose acetate, glass fibre membranes, nylon membranes and dialysis membranes.

65. (Previously Presented) A device according to claim 58, wherein the diffusion-limiting membrane is or is associated with a molecular charge selective material.

66. (Previously Presented) A device according to claim 65, wherein the molecular charge selective material is selected from poly(4-vinylpyridine), poly(2,6-dimethylphenol) and perfluorinated polymers having pendant sulphonic acid groups.

67. (Previously Presented) A device according to claim 58, wherein the thickness of the membrane, and therefore diffusion pathway, is in the range of from 0.02 to 0.15 mm.

68. (Previously Presented) A device according to claim 67, wherein the thickness of the membrane, and therefore diffusion pathway, is less than 0.1 mm.

69. (Previously Presented) A device according to claim 58, wherein the thickness of the receiving phase is less than 1 mm.

70. (Previously Presented) A device according to claim 58, wherein the solid receiving phase is in the form of a cartridge or disk.

71. (Previously Presented) A device according to claim 58, wherein the immobilised solid phase material comprises C_8 to C_{18} chain length hydrocarbon groups bonded in a silica-based polymer.

72. (Amended) A device according to claim ~~59~~ 58, wherein the solid support comprises a matrix of fibres.

73. (Previously Presented) A device according to claim 72, wherein the matrix of fibers comprises hydrophobic fibres.

74. (Previously Presented) A device according to claim 58, wherein a face of the membrane remote from the receiving phase is provided with netting or a mesh.

75. (Previously Presented) A unit for use as a passive sampling device, which unit comprises a device according to claim 58, and an inert body adapted to allow insertion therein and removal therefrom of the solid receiving phase and adapted to allow access form the aqueous environment of the micropollutants to the membrane.

76. (Previously Presented) A unit according to claim 75, provided with removable means for enabling water or conditioning liquid to be maintained in contact with the solid receiving phase between preparation and use of the device.

77. (Previously Presented) A unit according to claim 75, wherein the unit and/or removable means comprise(s) PTFE.

78. (Amended) A passive sampling device for monitoring over a period of time the concentrations of micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane contactable in use with the aquatic environment to be monitored and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aquatic environment by said membrane,~~ a receiving phase having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase is: ~~a handleable and easily~~

(i) a removable unitary element;

(ii) separated from the aquatic environment by said membrane;

(iii) comprised of ~~comprising~~ a solid phase material immobilised by being bound in or to a hydrophobic solid support,

and wherein the diffusion-limiting membrane comprises pores traversing the membrane in a direction substantially at right angles to the plane of the membrane and having a diameter in the range of from 0.1 to 10 μm.

79. (Canceled)

80. (Previously Presented) A device according to claim 78, wherein the solid support is in the form of a solid carrier for the solid phase material, which does not contain or retain water within its structure and can not exchange water with its environment, whereby the solid support is not subject to loss of water and hence changes in dimension, due either to evaporation or osmotic efflux.

81. (Previously Presented) A device according to claim 78, wherein the diffusion-limiting membrane comprises a solid, hydrophobic material, which contains less than 1% water and/or is substantially non-porous, whereby the diffusion pathway comprises the solid polymer itself and not any water contained therein.

82. (Previously Presented) A device according to claim 78, suitable for monitoring polar, organic micropollutants, wherein the membrane is selected from polysulphone, polycarbonate, cellulose dialysis membrane, PTFE, PVDF and glass fibre.

83. (Previously Presented) A device according to claim 78, suitable for monitoring inorganic micropollutants, wherein the membrane is selected from cellulose acetate, glass fibre membranes, nylon membranes and dialysis membranes.

84. (Previously Presented) A device according to claim 78, wherein the diffusion-limiting membrane is or is associated with molecular charge selective material.

85. (Previously Presented) A device according to claim 84, wherein the molecular charge selective material is selected from poly(4-vinylpyridine), poly(2,6-dimethylphenol) and perfluorinated polymers having pendant sulphonic acid groups.

86. (Previously Presented) A device according to claim 78, wherein the thickness of the membrane, and therefore diffusion pathway, is in the range of from 0.02 to 0.15 mm.

87. (Previously Presented) A device according to claim 86, wherein the thickness of the membrane, and therefore diffusion pathway, is less than 0.1 mm.

88. (Previously Presented) A device according to claim 78, wherein the thickness of the receiving phase is less than 1 mm.

89. (Previously Presented) A device according to claim 78, wherein the solid receiving phase is in the form of a cartridge or disk.

90. (Previously Presented) A device according to claim 78, wherein the immobilised solid phase material comprises C_8 to C_{18} chain length hydrocarbon groups bonded in a silica-based polymer.

91. (Amended) A device according to claim ~~79~~ 78, wherein the solid support comprises a matrix of fibres.

92. (Previously Presented) A device according to claim 91, wherein the matrix of fibres comprises hydrophobic fibers.

93. (Previously Presented) A device according to claim 78, wherein a face of the membrane remote from the receiving phase is provided with netting or a mesh.

94. (Previously Presented) A unit for use as a passive sampling device, which unit comprises a device according to claim 78, and an inert body adapted to allow insertion therein and removal therefrom of the solid receiving phase and adapted to allow access from the aqueous environment of the micropollutants to the membrane.

95. (Previously Presented) A unit according to claim 94, provided with removable means for enabling water or conditioning liquid to be maintained in contact with the solid receiving phase between preparation and use of the device.

96. (Previously Presented) A unit according to claim 95, wherein the unit and/or removable means comprise(s) PTFE.

97. (Amended) A device for monitoring micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material supported by a solid support and wherein the diffusion-limiting membrane comprises polyethylene.

98. (Amended) A device for monitoring micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a

sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material comprising C8 to C18 chain length hydrocarbon groups bonded in a silica-based polymer.

99. (Amended) A device suitable for monitoring inorganic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase <u>being separated from the aqueous environment by the membrane and</u> having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material supported by a solid support and wherein the membrane is selected from cellulose acetate, glass fibre membranes, nylon membranes and dialysis membranes.

100. (Amended) A device for monitoring micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material supported by a solid support and wherein the diffusion-limiting membrane is or is associated with a molecular charge selective material selected from poly(4-vinylpyridine), poly(2,6-dimethylphenol) and perfluorinated polymers having pendant sulphonic acid groups.

101. (Previously Presented) A method for monitoring micropollutants in a polluted environment, which method comprises:

(a) providing a receiving phase comprising an immobilised solid phase material for the micropollutants, which material is supported by a solid support;

(b) providing a diffusion-limiting membrane adapted to allow rate-limited diffusion therethrough of the micropollutants and, in use, adapted to separate the receiving phase from the polluted environment;

(c) bringing the membrane into contact with the polluted environment for a sufficient period of time to allow the micropollutants to collect in the immobilised solid phase material;

(d) removing the solid receiving phase from the environment; and

(e) analysing the micropollutants accumulated in the receiving phase

wherein the step (e) comprises applying extraction solvent to the receiving phase, whereby the analytes are removed from the receiving phase.

102. (Previously Presented) A method according to claim 101, wherein the extraction solvent is applied to one face of the receiving phase and is collected, containing the micropollutant analyte(s), at the opposite face thereof.

103. (Previously Presented) A method for monitoring micropollutants in a polluted environment, which method comprises:

(a) providing a receiving phase comprising an immobilised solid phase material for the micropollutants, which material is supported by a solid support;

(b) providing a diffusion-limiting membrane adapted to allow rate-limited diffusion therethrough of the micropollutants and, in use, adapted to separate the receiving phase from the polluted environment;

(c) bringing the membrane into contact with the polluted environment for a sufficient period of time to allow the micropollutants to collect in the immobilised solid phase material;

(d) removing the solid receiving phase from the environment; and

(e) analysing the micropollutants accumulated in the receiving phase, which further comprises pre-treating the receiving phase by coating or impregnating it with the diffusion-limiting membrane; by conditioning it with a conditioner; or by loading it with internal standard; or any combination thereof.

104. (Previously Presented) A method for monitoring micropollutants in a polluted environment, which method comprises:

(a) providing a receiving phase comprising an immobilised solid phase material for the micropollutants, which material is supported by a solid support;

(b) providing a diffusion-limiting membrane adapted to allow rate-limited diffusion therethrough of the micropollutants and, in use, adapted to separate the receiving phase from the polluted environment;

(c) bringing the membrane into contact with the polluted environment for a sufficient period of time to allow the micropollutants to collect in the immobilised solid phase material;

(d) removing the solid receiving phase from the environment; and

(e) analysing the micropollutants accumulated in the receiving phase, which further comprises pre-treating the receiving phase by treating it with an agent adapted to complex, chelate or otherwise assist the receiving phase to receive and retain the chosen micropollutant.

105. (Previously Presented) A method for monitoring micropollutants in a polluted environment, which method comprises:

(a) providing a receiving phase comprising an immobilised solid phase material for the micropollutants, which material is supported by a solid support;

(b) providing a diffusion-limiting membrane adapted to allow rate-limited diffusion therethrough of the micropollutants and, in use, adapted to separate the receiving phase from the polluted environment;

(c) bringing the membrane into contact with the polluted environment for a sufficient period of time to allow the micropollutants to collect in the immobilised solid phase material;

(d) removing the solid receiving phase from the environment; and

(e) analysing the micropollutants accumulated in the receiving phase, which further comprises pre-treating the receiving phase by coating or impregnating it with a photometric agent selected from bathocuproine, methylthymol blue, xylenol orange, glycine cresol red, binchinonic acid and 1,5-diphenyl carbohydrazide.

106. (Previously Presented) A method for monitoring micropollutants in a polluted environment, which method comprises:

(a) providing a receiving phase comprising an immobilised solid phase material for the micropollutants, which material is supported by a solid support;

(b) providing a diffusion-limiting membrane adapted to allow rate-limited diffusion therethrough of the micropollutants and, in use, adapted to separate the receiving phase from the polluted environment;

(c) bringing the membrane into contact with the polluted environment for a sufficient period of time to allow the micropollutants to collect in the immobilised solid phase material;

(d) removing the solid receiving phase from the environment; and

(e) analysing the micropollutants accumulated in the receiving phase, which further comprises pre-treating the receiving phase by coating or impregnating it with an internal standard comprising an isotopically-labelled compound, capable of, during deployment of the device, diffusing from the receiving phase through the diffusion-limiting membrane and into the aquatic environment at a known and controlled rate.

107. (Amended) A device for monitoring non-polar, organic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants

wherein the receiving phase comprises an immobilised solid phase material and the diffusion-limiting membrane comprises a solid, hydrophobic polymeric material capable of determining rate of diffusion of the micropollutants therethrough and wherein the diffusion-limiting membrane comprises polyethylene.

108. (Amended) A device suitable for monitoring inorganic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants

wherein the receiving phase comprises an immobilised solid phase material and the diffusion-limiting membrane comprises a solid, hydrophobic polymeric material capable of determining rate of diffusion of the micropollutants therethrough, said membrane being selected from cellulose acetate, glass fibre membranes, nylon membranes and dialysis membranes.

109. (Amended) A device for monitoring non-polar, organic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants

wherein the receiving phase comprises an immobilised solid phase material and the diffusion-limiting membrane comprises a solid, hydrophobic polymeric material capable of determining rate of diffusion of the micropollutants therethrough which is or is associated with a molecular charge selective material selected from poly(4-vinylpyridine), poly(2,6-dimethylphenol) and perfluorinated polymers having pendant sulphonic acid groups.

110. (Amended) A device for monitoring non-polar, organic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants

wherein the receiving phase comprises an immobilised solid phase material comprising C8 to C18 chain length hydrocarbon groups bonded in a silica-based polymer and the diffusion-limiting membrane comprises a solid, hydrophobic polymeric material capable of determining rate of diffusion of the micropollutants therethrough.

111. (Amended) A device suitable for monitoring inorganic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material, and the diffusion-limiting membrane comprises pores traversing the membrane in a direction substantially at right angles to the plane of the membrane and having a diameter in the range of from 0.1 to 10 μm, and wherein the membrane is selected from cellulose acetate, glass fibre membranes, nylon membranes and dialysis membranes.

112. (Amended) A device suitable for monitoring inorganic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase being separated from the aqueous environment by the membrane and having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material, and the diffusion-limiting membrane comprises pores traversing the membrane in a direction substantially at right angles to the plane of the membrane and having a diameter in the range of from 0.1 to 10 μm, and wherein the diffusion-limiting membrane is or is associated with a molecular charge selective material selected from poly(4-vinylpyridine), poly(2,6-dimethylphenol) and perfluorinated polymers having pendant sulphonic acid groups.

113. (Amended) A device suitable for monitoring inorganic micropollutants in an aquatic environment, which device comprises:

(a) a diffusion-limiting membrane capable of being in contact with the aqueous environment when the device is in use and adapted to allow rate-limited diffusion therethrough of the micropollutants; and

(b) ~~separated from the aqueous environment by the membrane,~~ a receiving phase <u>being separated from the aqueous environment by the membrane and</u> having a sufficiently high affinity for the micropollutants for receiving and retaining the micropollutants;

wherein the receiving phase comprises an immobilised solid phase material comprising C8 to C18 chain length hydrocarbon groups bonded in a silica-based polymer, and the diffusion-limiting membrane comprises pores traversing the membrane in a direction substantially at right angles to the plane of the membrane and having a diameter in the range of from 0.1 to 10 μm.

114. (New) A method of monitoring micropollutants in an aquatic environment, comprising:

placing a passive sampling device in contact with the aquatic environment;

receiving and retaining, in the passive sampling device, a quantity of the micropollutants from the aquatic environment; and

analyzing the quantity of micropollutants retained by the passive sampling device;

wherein the passive sampling device includes:

a hydrophobic support material;

a solid phase material bound to the hydrophobic support material and configured with a sufficiently high affinity for the micropollutants in the aquatic environment to receive and retain the quantity of micropollutants; and

a diffusion-limiting membrane configured to separate the aquatic environment from the solid phase material and to allow rate-limited diffusion therethrough of the quantity of micropollutants.